Notebook, N-10-11-19

all flows at 10'00 - speed up to No 3 4

Reg Mix 37½ shellac
12½ tetra
15 asbestos — through 60 mesh
No-1 heat mix to 284 F mold 280 F
asbestos warmed in oven before mixing
weight of Record 39 g speed 15'00

No 2 Drop of No 1 - except mix heat to 311
No 3 " " " 300
weight of Record 44.5
No-4 Drop of No 3 - Weight of Record 49 g

No-5 Mix for end rings 12½ shellac
speed 1500 37½ tetra (300 F)
45 asbestos

Poured at 300 mold 290
Stuck in mold -

No-6 Had Mold Nickel plated
Mix for end rings 12½ shellac
speed 15'00 37½ tetra (300 F)
45 asbestos

Weight of Blank for end rings 110.5
for small end

No 7 mix for Large end rings 56½ shellac
speed 15'00 18¾ tetra
Asbestos not screened 22½ asbestos (300 F)
Weight of Blank for end rings 141.5
for Large end

Weight of small end ring 1109
" " side 2/32 - 1/16 Inside

Time for pressing rings in mold
65 sec Ring 55 sec

Ring oven 210 ℉

Ring mold 280 ℉

No 8 temp for Mold 295. Min 300
No 9 " " 300 " 310
No 10 Sup of No 9 except run Mold to try and see if the record will extract with out pulling

No 9½ 37.5 Shellac 12.5 tetra 15 asbestos
2.5 Dechlorobydrine Alpha expand 1500
Hard to extract from Mold
Mold 300 Min 300

No 10 Sup of 9 Except Mold 280 Min 280

Reamed to shot

~~No 11 Sup of 10~~

No - 11 Expt for contraction

Shellac 45 g tetra 15 g - 4" Arochlor 60 mix all nights

alpha - no asbestos - Let lay on ice 14 hrs

could not extract it on cracked ice + salt

1 hr came out of mold hard

Mold 280 Mix 280

Cold test on Records

2 Records with straight 3/32 taper paper cores - marked 1 + 2

2 Records with straight paper cores with rings in ends - marked A + B

1 - 2 - A + B were put in ice test and did not show any cracks at 4° below zero. Then they were put in Carbonic Acid test

#1 cracked after 30 min at - 40 below zero

" 2 " " "

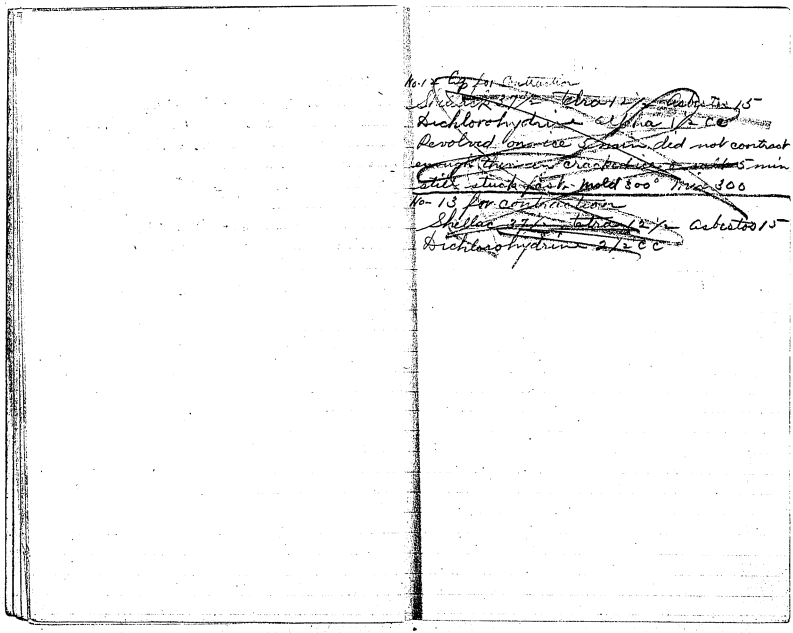
" A did not crack at 40 below

" B " "

Same Records on hot test at 110° F - 2 that layed down flattened the two that stood up warped out of shape - the mix was

37½ shellac 12½ tetra - 15 Asbestos Reg

Mixed 280 F mix 270 F



#12 Experiment for contraction
Shellac 37.5g Tetra 12.5g dry Asbestos 60 mesh 15g
Dichlorohydrine Alpha 1½ CC evolved on
Ice 5 minutes did not contract enough to
come out then put in cracked Ice +
salt 5 minutes still stuck but could
not pull it out took molds and hit
it on end and forced it and then it
came out but to close did not shrink
enough dragged on side of molds
Temperture of molds 300 F Mix 300 F

#13 experiment for Contraction
Shellac 37.5g Tetra 12.5g dry Asbestos 60 mesh 15g
Dichlorohydrine Alpha 2½ CC
put molds on Ice 5 minutes then took
molds and forced it on end and then it
came out but not shrink enough cylinder
dragged on side of molds
Temperture of molds 300 F + Mix 300 F

#14 exp for contraction 60 mesh
Shellac 37.5g Tetra 12.5g dry Asbestos 15g
Temperature of molds 300F Mix 300F
Put on 2cc 5 minutes then forced molds on end and it came out but end of record stuck to end of molds.

#15 Exp for Contraction 60 mesh
Shellac 42.5g Tetra 7.5g dryed Asbestos 15g
Temperature of molds 280F Mix 300F
Put on 2cc 5 minutes Came out same cancel them #14

Disk

16

60 mesh

Shellac 156g Tetra 50g asbestos 60g

Poured out on glass

Disk

#17

60 mesh

Shellac 120 tetra 42 asbestos 96

Potash 15 shellac tetra 4 asbestos 12

Disk

#18

60 mesh

Shellac 90 tetra 30 asbestos 72

Chalk 90 - could only get 45 of the chalk in then it was so stiff I had to take it out of pan with a spatula and press it down with flat piece of glass

Potash 15 shellac 15 tetra 5 asbestos 12 chalk 15

15 shellac 3 Tetra 10 asbestos

shellac 15 Tetra 5

J.W.A. Resin 37.5 Tetra 12.5 Asbestos 15

Lisch

#19 60 mesh

shellac 120 Tetra 24 Asbestos 80

Lisch

#20

shellac 135 Tetra 45

Lisch

#21 60 mesh

J.W.A. Resin 150 Tetra 50 Asbestos 60

shellac 37.5 Tetra 12.5 asbestos 15
flour of sulphur 10%

"Disk

#22
shellac 150g Tetra 50g Asbestos 60g (60 mesh)
flour of sulphur 26g

Through 60 mesh

#23 - Shellac 45g Tetra 12g Asbestos 36
Bimitrotulol - Mold 300 Mix 310
on ice 5 min - had to pare it to get it out

Through 60 mesh

#24 Shellac 45g Tetra 9g Asbestos 36
Bimitrotulol 6g - Mold 300 Mix 310
on ice 5 min - had to pare and pull
to get it out

Through 60 mesh

#25- Shellac 45 Tetra 12 Asbestos 36g Paraformaldehyed 3-cc. Mold 300 Mix 310 on ice 5 min had to jar them pull to get it out

Through 60 mesh

No 26- Shellac 45g Tetra 9 Asbestos 36 Paraformaldehyed 6cc - Mold 300 Mix 310 Could only get 1/2 Record the Paraformaldehyed made it swell up so it cant be poured had to jar mold to get record out

#27 - Shellac 45g tetra 12g through 60 mesh Asbestos 36g
NG Diaminidin Base 6g thick wont flow
" makes it condense

#28 - Shellac 45g tetra 9g through 60 mesh Asbestos 36g
NG Diaminidin 6g N.G.

60 mesh

#29 Shellac 45g tetra 12g Asbestos 36g
Nitroanisol Para 3g Mold 300 Mint 310
had to par it to get it out
on ice 5 min

Ground 60 mesh

#30 Shellac 45g tetra 12g Asbestos 36g
Nitroanisol Para 6g Mold 300 Mint 310
on ice 5 min had to par it hard pulling
to get it out record is quite soft

#31 Jow A. Resin

Resin 56.25g Jetra 18.75g Asbestos 22.50mesh
Mold: 300°F Mix 320°F pulled out hard

#32
Jow Resin
Resin 56,25g Jetra 18.75g Asbestos 45g
Mold: 300°F Mix 320°F pulled out hard

#38
Juvo Resin
Resin 5625g Jeta 18,75g Arbutin 5625g
Mold 300 Mix 330 pulled out hard

34- Dup of 33 except Mold 310
mix 350 on ice 5 min pulled out
hard

#35 - 37½ Shellac 12½ tetra 15 Tristrostes
Speed of Lathe increased from 1500
revolutions to 1800
on ice 5 min came out easier than
any so far temperature of Mold 230 F
Mix 310 F

#36 Dup of 35 - dropped out after
slightly jaring
temperature of Mold 230 F Mix 310 F
Speed 1800

37- Dup of 35- tried to press mold with finger on one side to see if the shrinkage could be felt then turned mold up and Ricord dropped out temperature of molds 230 F mix 310 F speed 1600

38 Dup of 35 except after reaming put on Vacuum did not come out. had to put on Ice then came out fair temperature of molds 230 F mix 310 F Vacuum Collapsed the record speed 1600

39 Deg of 35 except put on Vacuum when just warm did not come out put on 2cr came out fair
Temperture of molds 230 F Mix 310 F
Speed 1800

40 Deg of 35 except put in cold jacket until cold then put on Vacuum did not come out put on 2cr 5 minutes came out fair
temperture of Molds 230 F Mix 310 F
Speed 1800

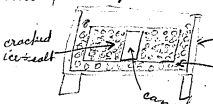
41 Dups of 35 Except after four minutes put on Vacuum did not come out forced molds hard on end then came out slightly collapsed temperture of molds 230 F mix 310 F Speed 1500

42 Dups of 35 Except after 2½ minutes put on Vac for 5 minutes then came out fair temperture of molds 230 F mix 310 F speed 1500

43 Dups of 35 Except after one minute put on Vacuum to soft Collapsed on one end
Temperature of molds 230 Mix 310 F
Speed 1500

44 Dups of 35 Except made in regular way Molds 230 F Mix 310 F put on Vac 5 minutes and it collapsed and Mix stuck to Cups of Molds
temperature Molds 230 F Mix 310 F
Speed 1500

#45. Took regular mix + regular way of spinning Record put mold in can that was packed in salt and cracked ice after 5 min. took mold of of can record still remained in mold tried it again at 15 min. still stuck in mold then let it go 40 min. Then picked out mold and record remained in can - droped out of mold — Speed 1800



46 Duplicate of 45 Except cooled on ice 5 min then in the can for 5 min. in taking the mold out it was slightly jared and record droped out
Speed 1800

#47
Drop of 45° Except 4 min. on ice 5 min in can a very slight jar and it dropped out. in the following experiments a piece of copper is put between can and mold to conduct the cold to the mold

Speed 1800

#48 Drop of 45° Except 2 min on ice 5 min in can a very slight jar and out it dropped

Speed 1800

#49 Sup of 45 Except 2 min on ice 5 min in can - a slight jare and it droped out Found 1800

#50 Sup of 45 Except 1 min on ice 5 min in can droped out by slightly jarring Found 1800

#51 Drop of 45° Except ½ min on ice 5 min in can slight jar - OK speed 1600

52 Drop of 51 - OK speed 1800

#53 Bath of 45 except 15 min. in can did not come out free sped 1500

#54 Bath of 45 Except ½ min on ice and 4 min in can did not shrink enough - sped 1500

55- Dup of 45 Except 1 min on ice 4 min in can slight gave dropped out O.K - Sheet 15 00

56 Dup of 45 Except 1 min on ice 3 min in can slight gave dropped out O.K - Sheet 16 00

57. Dup of 45 Except 1 min on ice 2 mins in can slight jare dropped out OK - opened 1808

58 Dup of 45 Except 1 min on ice 1 min in can slight jare dropped out OK - opened 1808

#59- Reg shellac mix - shellac 3½ g tebra 12½ c Asbestos 15. Mix run in mold ~~into~~ mold revolved 2 min the 50 g regular record wax run in for a backing then mold put on ice for 1½ min the in cam 2 min dropped out with a slight jare - speed 1000

60 Dup of 59 Except 2.5% Asbestos added to to the Record wax. both inner and outter walls cracked shellac had not flowed the full length of mold - mold was not hot enough - the amt. of shellac mix used in the record was ⅔ of what was used in No 59

Most of the Asbestos settled out of wax - speed 1500

#61 Dump of 60 Except 10% asbestos - shellac and record wax cracked - speed 1800

#62 Dump of 60 Except 100% asbestos - shellac and record wax cracked - speed 1500

#63. Dup of 59 Except 3/5 the amt of Rg shellac mix used - record way cracked
75 g Record wgt at 220° F - speed 1500

64 Dup of 63 Except 60 g. Record was not enough wax was shrunk away shellac on cooling - speed 1500

"65 Shellac 25g tetra 8/3g Asbestos 10g Pyrate
70g Record wax with 5% chalk molded
was not hot enough to allow the shellac to
run the full length of mold left out
on window sill 1hr dropped out not
cracked - Speed 1800

"66 Shellac 25g tetra 8/3g asbestos 10g spun
for 2 min then 70g record wax with 5% chalk run in then reamed to right size
then cooled on window sill 10 min temp 40°
then in can 2½ min dropped out
Record wax slightly contracted from shellac mix
Speed 1800

Record wax 220

#67 shellac 25 tetra 8/3 asbestos 10 spun 2 min then 75g record wax with 10% chalk run in then reamed to right size then cooled on ice until the record wax fills cool inside the mold cracked on ice - spun 1800

"68 Drop of 67 Except 15% chalk in record wax come out easily by cooling on ice did not crack - spun 1800

½ Dog end of Joint

#69 shellac 18¾ tetra 6¼ Asbestos 7½
core out on ice OK sp. wt 1500
Backed with record wax + 15% chalk
cold test
wax cracked at 30° F
Shellac " 40 F or 40 C
taken out — warm

#70 Shellac 18¾ tetra 6¼ Asbestos 7½
Backed with record wax 20% chalk — wax poured 1 min
after shellac mix had been poured, reamed
and allowed to cool before putting on ice
on ice 1½ min come out OK
did not have a good surface possable poured
wax to quick sp. wt 1500

116-71 Dup of 70 Except poured record was 1½ min after pouring shellac - spun at 1800 came out OK on ice allowed it to cool before putting on ice
70 g record was not enough for Cold Test
was cracked at
Shellac OK at 56°F or 49°C
in 1 hr

1172 Dup of No 71 Except used 150 g record was slanted out 37 g record was - spun at 1800 came out OK

#73 Bup of 71 Except ... chalk come out OK on ice ... speed 1800

Cold test

30 Put in bot at 58°F or 50°C
reading every ten min 37 C or 34,6F
" " " 48C 54,2 "
" " " 55 67. "
OK after 30 min no cracks

40% of the original mix

#74 Shellac 15 g tetra 5 Asbestos 6 g backed with wood wax with 25% chalk
Shellac mix did not run the full length of Mold - Lathe was set level - speed 1800 on ice out OK

Procedure

75- Dep of 1/4 Except poured at 2.00 and 2 min after the shellac had been poured funnell for shellac mix. not held up far in mold while beeing poured - used 1800 not enough shellac mix to fill mold

76 Dep of 75

No. 77 - Shellac 18¾ tetra 6¼ Asbestos 7½
Asbestos had been run through rolls
8 times rolls was set at .006 then ground
Shellac mix 310° - record was with 25%
Asbestos 220° - speed 1800
cooled in the open air dropped out
OK funnel not cleand from the
reg. mix

No 78 - Dup. of 77 Expt. funnel cleaned

#79 Shellac 16 ½ g total 6½ asbestos 7½
record wax with 35% Chalk - speed 1800
come out OK in cold air
cold test
wax cracked
Shellac OK at -48°C or -54.2 F
after 1½ hr

#80 Dup of 79. Except 35% Chalk in
Record wax
cold test
Put in temp 60°C or 76 F
for 30 min did not crack

Fat surface

81 Mallac 16½ Tetra 6½ Asbestos 7½
Mold 335 mins 310 speed 1500

82 drop of 73

Cold test
In ice box 10 min then in CO_2 ½ hr
In at 68.8°F
out " 76.
slightly cracked when taken out

Cold Test

#69 - was cracked at 30°F

Shellac " 40°F

83 drop of 73

Cold test

In ice bath 10 min then in CO_2 ½ hr

Put in CO_2 at 76°F

not " at 58°F

slightly cracked

"84 Dup of 73 Except ribbed

Cold test

In ice bot 10 min then in CO_2 ½ hr
Put in CO_2 at 58.° F
Out " " 56° F
Did not crack

85 Dup of 84"

Cold test

In ice bot 10 min then in CO_2 ½ hr
Put in CO_2 at 58.° F
Out " " 56.2° F
Did not crack

86 shellac 18 3/4 Extra 6 1/4 asbestos 7 1/2
mold @ 335° Mix 310 Panel warp ± 5° Chalk
280 Had to force mold to get it out
stuck Block warp shrunk away from
shellac - cooled 1800

87 Shellac 18 3/4 Extra 6 1/2 asbestos 7 1/2
mold 335° Mix 310 Block warp ± 20
shrunk away from shellac had to get out
of mold - cooled 1800

88 Dup of 86 except speed 900 instead of 1800
come out easily but surface bad
Block was shrunk away from shellac

#89 Shellac 18¾ tetra 6¼ antutex 7½
mold 340 wax 280 shellac mix 310
speed 1800 stuck fast in mold had to dissolve some of it out
record was had 40% chalk - was shrunk away from shellac

#90 Shellac 18 3/4 tetra 6 1/4 Asbestos 7 1/2
Mold 300 Shellac mix 310 wax 220 with
25% chalk speed 2100 had to shut it in
with foot
came to get it out of mold wax shrunk
away from shellac surfaces bad

#91 Shellac 18 3/4 tetra 6 1/4 Asbestos 7 1/2
mold 300 mix 310 wax ± 20 with 25% chalk
wax was poured immediately after pouring
shellac speed 1600

#92 Dup of 91 Expt 30% chalk in Black wax

#93 Regular shellac mix poured very slowly for surface not good did not run the full length of mold

#94 Dup of 93 Except poured twice as fast not a good surface

#95 Dup of 93 Except poured three times as fast surfacing

#96 Shellac 2 2/2 7½ tetra ¾ zinc stearate Tabutas 11 for surface - pink

#97 Dup of 96 Except 1½ g zinc sterate surface pumk

#98 Shellac 18¾ tetra 6¼ Asbestos 7½ naphtylamine 1g poured at 290 surface NG

#99 Dup of 98 Except 1g Benz Phenone
surface NG mix 290 mold 300

#100 Dup of 98 Except 1g Dimethylamidoazo-
benzol purified. mold 300 mix 300
Surface NG

#101- Dup of 98 Except 1g Dichlor anilin Coml
Mold 300 Min 300 surface not very good
some improvement

#102 Dup of 98 Except 1g Phenanthrene cp
Mold 300 Min 300 surface N G

#103 Dup of 98 Except 1g Ortho Toluol-sulphamido- surface little improvmt Mold 300 Mix 300

#104 Dup of 98 Except 1g Acet para Phenyl-endiamine Mold 800 Mix 300 Contains air surface

105 Shellac $18\frac{3}{4}$g Tetra $6\frac{1}{4}$g Asbestos $7\frac{1}{2}$g
Petrobengal 1.C.C. speed 1750
surface N.G. soften compound

106 Shellac $18\frac{3}{4}$g Tetra $6\frac{1}{4}$g Asbestos $7\frac{1}{2}$g
Speed 2400 did not take the air out
Surface N.G.
Temperature of molds 300 F. Mix 310 F.

Asbestos 1/4 short

#107 Shellac 7 1/2 tetra 1 1/2 Asbestos 11 1/4
mold 300 mix 310. Spun 1800
Surface not good

Asbestos 1/2 out

#108 Same as 107 Except 7 1/2 Asbestos
surface punk

Asbestos 3/4 out

#109- Dup of 107 Except 3/4 g asbestos
Surface N G

100 Dup of 107 Expt no asbestos
Surface N.G.

#111 Shellac 3/5 tetra 1 2/2 Asbestos 15 c
Asbestos put in tetra before shellac
Bad surface Speed 1800

#112 Supp of 111 Empk 7½ Asbestos
Bad surface

113 Shellac 37½ g Tetra 12½ g no Asbestos
Melted very easily and poured at 250 F.
Molds 300 F put funnel in oven to
get same temperature as molds
surface fair

114 shellac 37½ g Tetra 12½ g Asbestos 15 g
Mix 310 F Molds 300 F funnel warmed in oven
surface not very good

115 shellac 37½ g Tetra 12½ g Asbestos 15 g
Mix 250 F Molds 300 F funnel warmed in
oven Mix to thick did not pour well
surface NG.

#116 shellac 37½g Tetra 12½g Asbestos 7½g
Mix 310°F Mold 300°F funbel warmed in oven
surface N.G.

#117 Shellac 37.5g Tetra 12.5g Asbestos 7.5g
Mix 250°F Mold 300°F funbel warmed in oven
Mix to thick did not pour well
surface not good

#118 Shellac 37.5g Tetra 10.5g Asbestos 15g
melted tetra then put in asbestos funbel warmed in oven
Mix 310°F Mold 300°F
surface not good

119 shellac 37.5g Vetsa 12.5g Asbestos 15g
Mix 310°F Molds 300°F warmed funel in oven
poured it from one end did not flow to
end of molds surface not good

120 shellac 37.5g Vetsa 12.5g Asbestos 15g
Mix 330°F Molds 300°F funel warmed in oven
stuck to molds

121 shellac 37.5 Vetsa 12.5g Asbestos 15g
Mix 320°F Molds 300°F funel warmed in oven
stuck slightly to molds

#122, 123 + 124 Eq for running true

#125, 126, 127 + 128 Eq. for Blow holes

#129 Shellac 18¾ tetra 6¼ no arbatoy
Cf for playing surface

130

Regular 4 minute second wax blank — weight 73 g
Coated with shellac & Tetra Zinc — " 18 g shellac
15 g shellac
5.5 g Tetra
1/2 g stearate Zinc

131

Reg 4 min second wax 20% Chalk — weight 81.5 g
Coated with shellac & Tetra Zinc — " 18 g shellac
18 g shellac
5.5 g Tetra
1/2 g stearate Zinc

132

Reg 4 min record wax 40% Chalk — weight 86.9
Coated with shellac & Ictra Zinc — " 18g shellac
15g shellac
5.5g Ictra
½ Stearate Zinc

133

Reg 4 min record wax 18% Infusorial earth Zinc — weight 75g
Coated with shellac & Ictra Zinc — " 18g shellac
15g shellac
5.5g Ictra
½ g Stearate Zinc

#134.

Rig 4 min second wash 7% Infusorial earth tea — weight 73 g
Coated with shellac + Tetra Zinc — " 18 g shellac
15 g shellac
5.5 g Tetra
½ g Stearate Zinc

#135

Rig 4 min second wash 40% Talcum powder — weight 89.5 g
Coated with shellac + Tetra Zinc — " 18 g shellac
15 g Shellac
5.5 g Tetra
½ g Stearate Zinc

#136

Rig 4 min record wax 20% Talum powder weight 81.25 g
Coated with shellac + Vitra Zinc " 18 g shellac
15 g Shellac
5.5 g Vitra
1½ g Alternate Zinc

#137

Rig 4 min record wax blank weight 73 g
Coated with shellac titra + asbestos " 18 g shellac
7½ Sg Shellac
12.5 g Titra
15 g Asbestos screened through 60 mesh

H 138

Mg 4 min record wax 20% Chalk — weight 81.5 g
Coated with shellac Tetra + asbestos — 11 18 g shellac
3.75 g Shellac
12.5 g Tetra
15 g Asbestos through 60 mesh

H 139

Mg 4 min record wax 40% Chalk — weight 86 g
Coated with shellac Tetra + asbestos — 11 18 g Shellac
37.5 g Shellac
12.5 g Tetra
18 g Asbestos through 60 mesh

#1 140

Reg 4 min record wax 15% Infusorial earth tie weight 75 g
Coated with shellac Libra + asbestos 1/2 Reg shellac
37.5 g Shellac
12.5 g Tetra
15 g Asbestos through 60 mesh

#1 141 all cracked

Reg 4 min record wax 7% Infusorial earth tie weight 7.5 g
Coated with shellac Libra + asbestos
37.5 g Shellac
12.5 g Tetra
15 g Asbestos through 60 mesh

#142

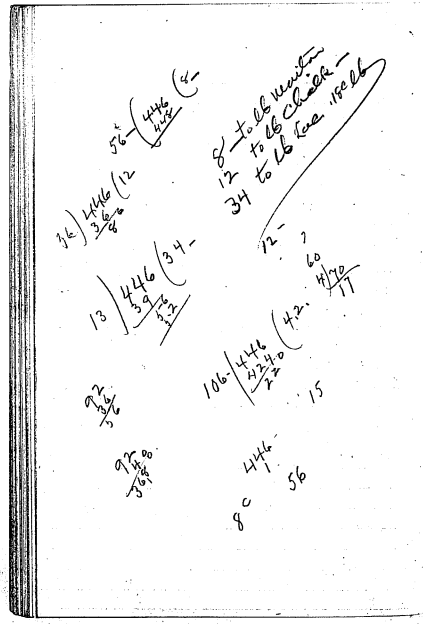
Reg 1 min-accord wax 40% Tolcum powder weight 87.5 g
Coated with shellac Tetra asbestos 17.5 g shellac
35.0 g Shellac
12.5 g Tetra
15 g Asbestos through 60 mesh

#143 all spoiled in flaking on shellac

Reg 1 min-accord wax 20% Tolcum powder weight 81.25 "
Coated with shellac tetra + Asbestos
35.0 g Shellac
12.5 g Tetra
15 g Asbestos through 60 mesh

#144 second spin skin
Reg 4 min wax put in molds and pressed to 1800 lbs
to square inch

#145
Duplicate of #144



#145-146-147-148-149 + 150 Shellac 37½g
12½g tetra 15g Asbestos 1.25 Zinc
sterate 4 mins (Record was had 40% Chalk)
weight of Blank before coating with shellac

Before Coating

145 -	91.8g	after coating	106.5	dif. 14.7g
146 -	93.5g	"	106.5	" 12.7g
147 -	93.7g	"	107.1	" 13.4g
148 -	91.5g	"	103.2	" 11.9g
149 -	93.3g	"	106.7	" 13.4g
150 -	92.2g	"	105.1	" 12.9g
			6) 79.0	
		Average -	13.16	

#6-150 had 500 lb pressure
" 148 " 500 "

Blanks made in 2.137 dia. Mold

#151-152-153+154 Reg Rivorol wax

151-152-153 had 1800 lbs when pressing
154 had 1000 lbs

No 155, 156, 157, 158, 159 + 160 Blanks was made of Raw Montan wax with 40% chalk and coated with Shellac 15g titra 5g + gene sterate 1/2 g
All cracked when pressed in mold except No. 156

	weight of Blank before coating	after coating	
#155	93.5g	104.6	dif. 11.1
156	92.4 "	103.7	11.3
157	92.5 "	104.9	12.4
158	92.9 "	105.5	12.6
159	94.4 "	106.0	11.6
160	93.7 "	106.1	12.4
		6	71.4

Average 11.9

Nos - 161, 162, 163, 164, 165 ~ 166 Blanks
was made of Raw montan wax with
20% Chalk and coated with, shellac 1.5 g
tetra 5 and zinc sterate 1/2 g
All cracked or small cracks except no 164

weight of Blank before coating	after coating	diff.
no. 161 – 86.2 g	96.9 g	diff. 10.7 g
162 – 83.4 "	95.7 "	12.3 "
163 – 82.1 "	96.4 "	14.3 "
164 – 84.1 "	96.9 "	12.8 "
165 – 85.4 "	97.4 "	12.0 "
166 – 86.3 "	99.2 "	12.9 "

$6 \overline{)74.9}$

Average 12.48

No 167, 168, 169, 170, 171 & 172 Blanks made from 2 min Record wax 40% chalk coated with shellac 15 tetra 5 ginc sterate 1/2
Shellac dope did not coat very good on wax blanks, surface of wax to oily

	weight of Blank before coating	after coating	diff.
No. 167 -	91.4 g	104.9 g	13.5 g
168 -	89.7 "	104.6 "	14.9 "
169 -	89.7 "	102.7 "	13.0 "
170 -	91.1 "	105.1 "	14.6 "
171 -	91.5 "	102.6 "	11.1 "
172 -	91.1 "	105.1 "	14.1 "
			6)81.2
		Average	13.53

#173, 174, 175, 176, 177 + 178 - Blanks made from 2 min Record wax 20% chalk, coated with Shellac 15 tetra 5 Gine stearate 1/2 - Shellac did not coat very good surface of wax Blank to oily

	weight of Blank before coating	after coating	diff
No 173 -	82.9 g	95.0 g	12.1 g
174 -	82.6 "	94.8 "	12.2 "
175 -	83.1 "	96.9 "	13.8 "
176 -	83.7 "	97.8 "	14.1 "
177 -	81.9 "	95.9 "	14.0 "
178 -	83.3 "	97.0 "	13.7 "
			6 | 79.9
		Average	13.31

#179, 180+181 - 4 min, wax 7% Cotton Flock
Speed of Lathe 540 - Drop test - 14 inches
cracked on second drop, used No. 179 for
drop test
No. 180 + 181 to be coated with shellac mix
Shellac 15 tetra 5 gms tetrate 1/2 and
fuel on cold test
Blanks warm when coated
Cold test 39 below zero. OK

#182, 183 + 184 4 min wax 5% Cotton Flock Speed
of Lathe 540. Drop test 14 inches, cracked on
fourth drop. No 182 Blank used. 183 + 184 to be
coated with shellac mix and fuel — cold test
Blanks warm when coated
Cold test. 39 Below Zero. Records OK

#185, 186 + 187 - 2 min wax 7% Cotton Flock
Speed 5740, drop test 14 inches - slight
crack at 25 drops then run it up to 3 x
times before it cracked full length of record
used No 185 Blank for test, No 186 + 187 to be
coated with shellac on just on cold test
Blanks Cold when coated
Did not coat very good when warm to oily
Cold test 39 Below zero. Records OK

#188, 189 + 190 - 2 min wax 5% Cotton flock
Speed 5740 drop test 14 inches - very slight
crack on end sixth drop No-188 Blank
used for test. No 189 + 190 to be Coated with
shellac and run on Cold test
Blanks cold when coated
Cold test Records OK at 39 Below zero

7% cotton flock

#191, 192 + 193 - ½ # min wash ½ 2 min wash
Speed 540 drop test 14 inches cracked at
27 drop - No 191 Blank used for drop test
No-192 + 193 Blanks to be coated with shellac
and put on cold test
Blanks coated when Cold
Records OK at 39 Below zero

#194, 195 + 196 ½ - 4 min wash ½ - 2 min wash
5% Cotton flock - Speed 540 - drop test 14
inches cracked at 19th drop No 194 Blank
used for drop test No-195 + 196 Blanks to
be coated with shellac for cold
test
Blanks coated when cold
Records OK at 39 Below zero

197 - 4 min work 7% wood pulp Speed 5-40 drop test 14 in cracks at second drop

6 Blanks No 198, 199, 200, 201, 202 + 203
4 min work 10% wood pulp. Test 3/0
Speed when spinning 1460. used No 203 on drop test height of drop 14 inches cracked at fifth drop

4 Blanks No 204, 205, 206, 207
4 min work 7% wood pulp Speed when spinning 1460. Drop test 14 in cracked at third drop No. 204 Blank used for test

4 Blanks No 208, 209, 210 + 211
4 min work 5% wood pulp Speed when spinning 1460 - Drop test 14 in Cracked at second drop No 211 Blank used for test

4 Blanks No 212, 213, 214, 215
4 min wax 10% Cotton Flock Speed when
Spinning 1460 Drop test 14 inches cracked
slightly inside at 16th drop cracked outside
at twenty first drop No 212 Blank used for
test

4 Blanks No-216, 217, 218, 219
4 min wax 7% Cotton flock Speed when
Spinning 1460 Drop test 14 inches very
slight crack on inside at fifth drop
No 217 Blank used for test

4 Blanks No. 220, 221, 223, 224
4 min wax 5% Cotton Flock Speed when
Spinning 1460 Drop test 14 ins. slight on
fourth drop No 220 Blank used for test

4 Blanks No 225, 226, 227, 228
2 min wool 10% wood pulp Speed when spinning 1460 temp 360 Drop test 14 in slight crack at fourth drop No 225 Blank used for test

4 Blanks No 229, 230, 231, 232
2 min wool 5% wood pulp - Speed when spinning 1460 Drop test 14 in Cracked on first drop No 229 Blank used for test

4 Blanks No 233, 234, 235, 236
2 min wool 7% Cotton flock - Speed when spinning 1460 - Drop test 14 in Chipped a little on end at 43 drop - No 233 Blank used for test

4 Blanks No 237, 238, 239, 240
2 min wax 5% Cotton Block Speed when spinning 1460. Drop test 14 in - slight crack on end 12th drop No 237 Blank used for test

4 Blanks No 241, 242, 243, 244 10% wood pulp
½ - 4 min wax ½ - 2 min wax Speed when spinning 1460 Drop test 14 in slight crack on end at 11th drop No 43 Blank used for test

4 Blanks No 245, 246, 247, 248
½ - 4 min wax ½ - 2 min wax 7% wood pulp
Speed when spinning 1460. Drop test 14 in. Cracked on second drop No 246 Blank used for test

4 Blanks No 249, 250, 251, 252
½ 4 min wax ½ - 2 min wax 5% wood pulp
Speed when spinning 1460 1460 Drop test
14 in. cracked on first drop No 249
Blank used for test

4 Blanks No 253, 254, 255, 256
½ - 2 min wax ½ - 4 min wax 10% Cotton Flock
Speed when spinning 1460 - Drop test 14 in.
Chipped on second drop and cracked on
third drop No 253 Blank used for test

4 Blanks No - 257, 258, 259, 260
½ - 4 min wax ½ - 2 min wax 7½ Cotton Flock
Speed when spinning 1460 - Drop test 14 in.
Cracked on second drop

4 Blanks No. 261, 262, 263, 264

½ - 2 min wax ½ + min wax 5% Cotton Flock

Speed when spinning 1460 - Drop test 14 inches slight crack on second drop

No. 261 - Blank used for test

Mix for Blue Records

No. 1 mix - 5g tetra ½ g zinc stearate 200 mg Victoria Blue B. Base, From Heller + Merz

To 15g Shellac add 5.7g of No. 1 mix

Blanks made in 24 building

#1 Dope put on limbs 230 to 240 F warm blanks. blanks run 80 Rw stirrer at 217 R

#2 Dope put on limbs 280 to 290 Cool blanks blanks 80 R stirrer 217 R

#3 Dope put on 270 to 280 warm blanks blanks run 80 stirrer 217 R

#4 Dope put on at temp 280 to 290 Cold blank blank run 48R steer 217 R

#5 Dope put on temp 280 to 290 warm blank blanks run 48R steer 217 R no dye put in

#6 Dope put on temp 270 to 280 Cold blank blank run 48R steer 217 no dye put in

#17 Drops put in temp 270 F 280 cold Klenke
Klenke-ran 80 R slurry 217 no dye put in

#18 Drops put in temp 240 F cold Klenke
Klenke-ran 80 R slurry 217 40 grams
was mix 1 gram of Phenacetin drops
was very liquid

Exp. to have Shellac varnish stick to Blanks

1000 - 4 min wax 90 g Rosin 10 g
6% Cotton Flock (NG)

1001 4 min wax 80 g Rosin 20 g
6% Cotton Flock Mold Oven temp 270
temp of wax 270 (NG)

1002 - 4 min wax 70 g Rosin 30 g
6% Cotton Flock Mold Oven temp 270
temp of wax 270 Cant extract at normal temp ahead to put on ice.
Cant extract good spots of wax stick to mold (NG)

1003 Venice turpentine dissolved in Carbon tetrachloride for Prime coat (N G)

1004 Venice turps dissolved in Shellac Varnish (N G)

1005 Venice turps dissolved in Carbon tetra then put in Petits oven all night temp of oven about 150, In morning turps all washed in wax (N G)

1006 Venice turps dissolved in Carbon tetra then mixed with Shellac varnish then put in Petits oven (N G)

1007 Took 2 of No 1005 put on another coat of Venice turps dissolved in Carbon tetra (N G)

#1008 Raw Montan 90 Rosin 10 6% Flock
Melting point to low about 160

#1009 Raw Montan 45 - 4 min wax 45 -
10 Rosin 6% Flock
not very good Pin holes in blanks

#1010 - 2 of #1009 Coated with Venice turps
for Prime Coat

#1011 - 4 min wax 95 Rosin 5 Flock 6%
Venice turps dissolved in Carbon tetrachlo
for Prime coat

#1012
90 Raw Montan 5 Rosin 25 White wax
6% Flock - would stand more flock

#1013
90 Raw Montan 5 Rosin 50 white wax
6% flock

Butler Horn Reg

#1014 – 90 Raw Montan 5-0 white wax 6% flock . Dont mix good - Pin Holes

#1015 - 90 4 min wax : Rosin 3 5 white wax 6% Flock

#1016-90 4 min wax 5- Rosin 5-0 white wax 6% Flock

#1017 - 90 4 min wax 50 white wax 6% Flock Dont mix good Pin holes

#1018 - 90 Montan 25 Gilsonite Flock 6%

#1019 - 90 Montan 50 Gilsonite Flock 6% sticks to mold temp. when poured 8 40

1020 - 90 4 min wax 25 Gilsonite 6% flock sticks to mold

#1021
90-4 min wax 12½ Gilsonite 6% flock
sticks to mold

#1022 - 90-4 min wax 5 Gilsonite
6% flock - sticks

#1023 - 90-4 min wax 5 Gilsonite
5 stearic acid 6% flock

#1024 - 90-4 min wax 10 Gilsonite
5 stearic acid 6% flock - sticks

#1025 - 120-4 min wax 75 Rosin
30 Chalk 45 Gilsonite 6% flock
sticks

#1026 - 120-4 min wax 75 Rosin
60 chalk 45 Gilsonite 6% flock
sticks

#1027 - 120-4 min wax 75 Rosin
60 chalk 45 Gilsonite 40 stearic acid
6% flock

#1029. Sizing - 5 coats 3 hrs between each coat left in drying Room 7 days befor pressing. Sticks Good

#1028
Montan 180 Rosin 50 chalk 120
13 flock (chips out slightly on Blank

#1029
180 Montan Rosin 50 chalk 75
12 flock + - Not Practical in Molding Blanks. Sticks & Mold in spots

#1030 - 180 4 min wax 50 Rosin
Chalk 100 flock 14 - Streak

#1031 - 184 - 4 min wax 50 Rosin
Chalk 125 flock 14 (346°)
stripes

#1032 - 184 - 4 min wax 25 Rosin
Chalk 100 flock 12 (streaks)

#1033 - 200 Montan 25 Sod. Sterate
13 1/2 flock Bond not good

5 coats 3 hrs between coats coat
in dry 2 Room 7 days

1035 10 good for taking 5 coats 3 hrs between
coats in dry 2 Room 7 days

1036 No good for taking 5 coats 3 hrs between
coats in dry 2 Room 7 days

#1034
200 Montan 50 Soda Sterate
13½ flock

#1035 200 Montan 75 Soda sterate
16.5 flock

#1036 Montan 200 Soda Sterate 100
flock 18 Pound at 280

#1037 200 4 min was 25 Sodium Sterate
13.5 flock Pin Holes

#1038 4 min was 50 Sodium Sterate 6
Pin Holes

#1039 210 Rosin 4% flock 50 chalk
Stark

#1040 210 Rosin 50 chalk 25 Sodium
Sterate 4% flock stuck on cop

#1041
210 Rosin 35 chalk 75 Sodium Stearate
6% flock Stick NG

#1042 250 white wax 12% flock
Sodium Stearate 50 Pine Hobo

#1043 Rosin 10 Caranoba wax 2 chalk 1
flock 1 Sticks

#1044 Rosin 10 Gilsonite 5 1/2 flock
Sticks

#1045 Rosin 10 Gilsonite 5 chalk 4
Sticky

#1046 Rosin 10 Gilsonite 5 chalk 4
Montan 2 Sticky

#1047 Caranoba 5 Sodium Stearate 1
NG

1/1048
Caranaba 5- Rosin 2 — Stricks

1/1049 White wax 5- Sod. Stearate 5- flock 6% Pin Holes

1/1050 White wax 10 Sod stearate 5- flock 6% Pin Holes)

10 51 White wax 10 Sod stearate 5- Rosin 10 Flock 6% — strikes

10 5-2 2 5-0 white wax 6 % flock — Pin Holes

10 5-3 2 5-0 white wax 5-0 Japan wax 6% flock Pin Holes)

10 5-4 2 5-0 white wax 5-0 Japan wax 5-0 Black Ozokerite 6% flock Pin Holes not good Mix

10 5-5 Black Ozokerite 5- white wax 1 6% flock (strickes)

#1056
High Speed Blanks prime coat of Air Drying Japaan Put in Petris oven 14 hrs at about 150°

#1057 Black ozokerite 5 white wax 2 flock 5 (stains)

#1058 High Speed Blanks prime coat of Bakerlight. In Petris oven 14 hrs

1059 High Speed Blanks prime coat of Sol. from Hookeyjack

1060 Enamel from Hookeyjack called Pecora Cuticle Enamel - 11.9 Hot Dip

#1061 150 Raw Montan Rosin 40 chalk 95 flock 12 (Chips on Extraction

#1062 150 Raw Montan Rosin 50 Infusorial-Earth 10 - Flock 13 180 (Chips on Extraction

#1063

250 Raw [illegible] Rosin 50 Flock 16.8
Infusorial Earth 10 Chips

#1064 – 200 Raw [illegible] Rosin 50
Flock 19.80 Infusorial Earth
Chips on Extraction

#1065
150 Raw Montan treated by [illegible] Dodd
50 Rosin, Infusorial Earth 20
Flock 13.80 (Chips on Extraction

#1066
150 Raw Montan treated by [illegible] Dodd
50 Rosin Infusorial Earth 20
13.80 Flock Lamp Black 5 (Sticks)

#1067

Dup of 1066 Except 10 of Lamp Black Chips

#1068
Raw Montan 180 Rosin 50
Flock 10 Chalk 75 Lamp Black 20 chips.

#1069

Dup. of 1068 Except 80 Lamp Black (chips)

#1070
50 Rosin treated with Ferric Oxide –
2½, then 180 Raw Montana #1678
Chalk 50 – (chips)

#1071 – Rosin 5 tetrachloride 1/4

1072 – " 5 " 1

#1073 – " 5 " 1¼

#1074 – " 5 " 2

1075 – " 5 " 3

#1076 Raw Montana 90 – 5 of No-1074
7% flock 25 Chalk Sticks & Tools

#1077 4 min wax 90 – 5 of No. 1074
7% flock 25 Chalk

1077 4 min wax 180 – 5 of No 1074 7% flock
50 chalk

#1078X 700 Bodd' Montane
200 Rosin
400 Chalk

#1078XX
700 Raw Montane
200 Rosin
Melt & filter — add Chalk 400

#1078XXX Raw Montan 600 — Bark Cracks Rosin 200 — 300° F
Melt together Raise temp 450° F filter — add Chalk 500

1050
NG Cracked — Drying Room

#1082X 700 Raw Montane
200 Rosin
250 Infusorial Earth
Temp. 300°

#1078 — 175 Raw Montan 700
50 Rosin 200
100 Chalk — Sticks 400

#1079 175 - 4 min wax
50 Rosin
100 Chalk — Bark Stick

#1080 175 Raw Montan
50 Rosin
Coated at 2 58 Opening 1/8

1081
175 - 4 min wax
50 Rosin — Bark Stick
Coated at 240 Opening 1/32

1082
700 Raw Montane
(Limit 990) 200 Rosin
~~250~~ Infusorial Earth
Coated at Opening
Sticks

#1084X Raw Montana ✓ 700
Rosin 400
Infusorial Earth 280
Temp. 300

#1084XX Start 1st
Raw Montana 700
Rosin (Bark Cands) 400
Melt - Temp 430° + filter
Requires 3 hours to clear off
the prints.
Add Infusorial Earth 270
Don't raise temp above 310°F.

#1084XXX Start 1st
Raw Montana 700
Rosin (Bark Candy) 400
Heat to 450°. Evaporate all
Bubbles. Reduce temp to 400°
and filter - time consumed 2½ hrs.
then Add Infusorial Earth 260.

#1083
4 Min Record Wax 700
Rosin — 200
Infusorial Earth 337
Coated at Opening

#1084 Raw Montana 700
Rosin — 400
Infusorial Earth 412
Coated at Opening

#1085 - 4 min Record wax 800
Rosin — 450
Infusorial 280
Coated at Opening

#1086 Raw Montana 700
Rosin — 400
Coated at Opening

#1087 - 4 min Record wax 700
Rosin — 400
Coated at Opening

#1088 Water 200 cc Plaster Paris 150
5-flock

#1089 Water 200 cc Plaster Paris 200
flock 10

#1090 Water 200 cc Plaster Paris 200
flock 15

1091 - 4 mi wax 240 - Rosin 100
Celamite 100 dont stick

1092 4 Ind. Wax 240 - Rosin 100
Celamite 100 dont stick

#1097 X 4 mi wax 250
Rosin 100
Celamite 150
Shellac M.E. 100

1093 X Same as #1093 except use
only 150 Earth

1093 Rum Montan 600
Dark amber Rosin 250
melt, Raise temp to 500° and
lower temp to clear off Bubbles
filter at 400°
add Impressional Earth (maximum limit) 170

#1094 Rare Montana 600
Sants Crude Rosin 250
Melt- Raise temp to 500°
and add
Tuffite Rock clay 200
after well mixed - filter

#1095 - Take #1092 after filtered
through Linen Bag 75% Sants
Melt & add Diatomaceous Earth 75 "
called Tokamonite

#1096 Rare Montana 700
Rosin 200
Gilsonite 100
Diatomaceous Earth 140

Daily #16

Make 4 times Regular Lot of Shellac Mix - pour out plate about 5 inches diameter -

Change proportions 17
50 15 Lac 4 Tetra 12 asbestos

another Lot -
#18 - 15 Lac 5 Tetra. 12 asbestos and 15 chalk

another Lot,
#19 15 Lac 3 Tetra. 10 asbestos

#20

Daily Make one record without asbestos

shellac 135 tetra 45

~~Make one Chalk without~~ asbestos

[ITEM FOUND IN BOOK]

#21

Dally

Try pva Resin in place of Shellac using same proportions of Tetra + Asbestos but substitute the Resin for the Shellac.

Resin 150g Tetra 50g asbestos 60g Disk
Regular record 562.5g Resin 187.5g Tetra
225 Asbestos #31

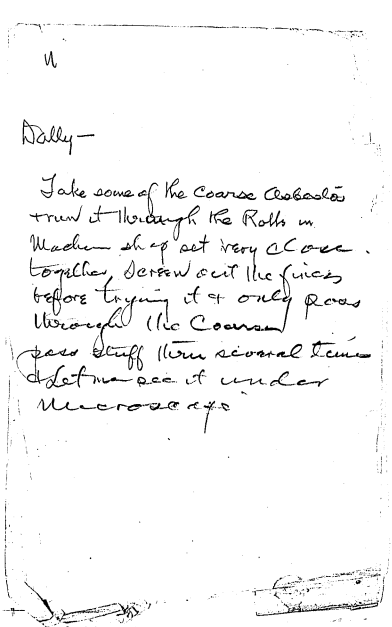
#22

Dally

Make the regular Lac mix but at 10% cc of flowers of Sulphur at the end just before you pour, + stir well but quickly

shellac 150 Tetra 50 Asbestos 60
flowers of sulphur 26

[ITEM FOUND IN BOOK]



N

Dolly—

Take some of the Coarse Asbestos
rinse it through the Rolls in
Machine shop set very close.
together, screw out the juices
before trying it + only pass
through the Coarser
pass stuff from several times
& let me see it under
Microscope &c

Bisnitrotoluol 12 asbestos
#23 15 Lac 4 Tolva 1 Nitrotoluol 12
Bisnitrotoluol
#24 15 Lac 3 Tolva 2 Nitrotoluol 12 asbestos

#25
15 Lac 4 Tolva - 1 Paraformaldehyde 12 Asbestos
#26
15 Lac 3 Tolva 2 Paraformaldehyde 12 asbestos

#27 Diamidin Base
15 Lac 4 Tolva 1 Diamidin 12 asbestos
#28
15 Lac 3 Tolva 2 " "
#29
15 Lac 4 Tolva 1 Nitroanisol Para 12 asbestos
#30 " 2 " "

[ITEM FOUND IN BOOK]

Nov - 19 - 1910

Mr Ott.

Cold test on Records.

1-2- a -13

were put on ice test and

Jan 6 - 1910 #2

Cold test on Records from Ott

Lot # 2

Time	Sept 32	Sept 0 F	Time	Remarks
400 Pm	1-8 "	17.6		
430 "	" 2 "	36.		# 131-132-133
500 "	" 7 "	+1.4		" 134-135-137
530 "	-34 "	-29		" 135-139-140
600 "	-40 "	-40		" 145

When they were put in Cabinet

for test

1 were cracked after 30 Min @ -40

" 2 " " " " " " "

" a " not " " " "

" B " " " " " " "

were after taken in warm room

a - B were OK

Lot # 2 - 10 Records

were taken directly from Room temperature into 17.6 °F

and again from -40 into room temperature

a jumps from 68°-17° = 51° into cold

" " " -40-68 = 108° " warm

All were OK

were also OK

Table of reading above

Chr.-

[ITEM FOUND IN BOOK]

#3

Jan. 9-11

Cold Test on Records

For Dr. Ott.

Lot # 3 - 12 Records

Time	Temp °C	Temp °F	Seals	Remarks.
9.10 AM	+3	37.4		
9.45 "	-6	21.2	½ open	at 11.15 iron was filled again with CO_2
10.15 "	-15	+5	all open	
10.45 "	-20	-4		
11.15 "	-35	-31	seals all open	
11.35 "	-40	-40		Records not without cartoons
11.45 "	"			
12.00 Noon	-41	-41.8		
12.30 P.M.	-42	-43.6		
1.00 "	-44	47.2		
1.30 "	-44	47.2		

Lot # 3 - 12 Records after gradually lowering the Temp. held at -40° to -47° for two hours. All OK at -47° F

a Jump of 240° F OK

From -47° F into boiling Water OK

Conclusion

#4

Cold test on Records

for Dr. Ott

Lot # 4 - 4 records

Time	Temp °C	Temp °F	Seals	Remarks
1.50 P.M.	-40	-40	Seals all open.	
2.20 "	-36	-32.8	" except. Used CO_2	
2.55 "	-27	-16.6	" " which were not	
3.30 "	-20	-4	shrivelled seals open. for Lot # 3	
4.10 "	-36	-13	seals "	
4.20 "	-31	-24		# 131-134-135-142

Lot # 4 - 4 records

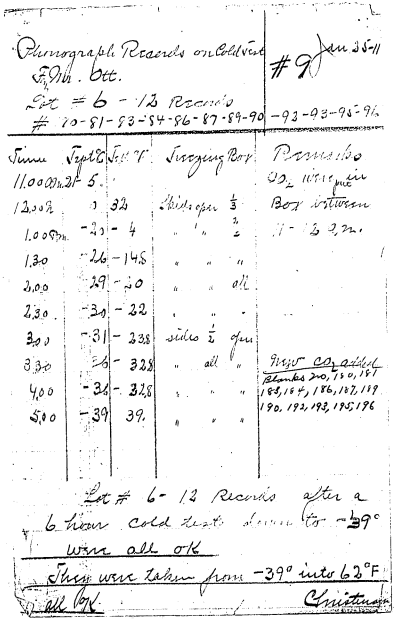
Put into -40° F from 68° F in Room Temp kept for 2 hours between -40 to -24

All OK

PS # 142 got a dent when taken out and cracked completely

Conclusion

[ITEM FOUND IN BOOK]



Phonograph Records on cold test
Edison. Dec.

Lot # 6 - 12 Records

10-81-83-84-86-87-89-90 -93-93-95-96

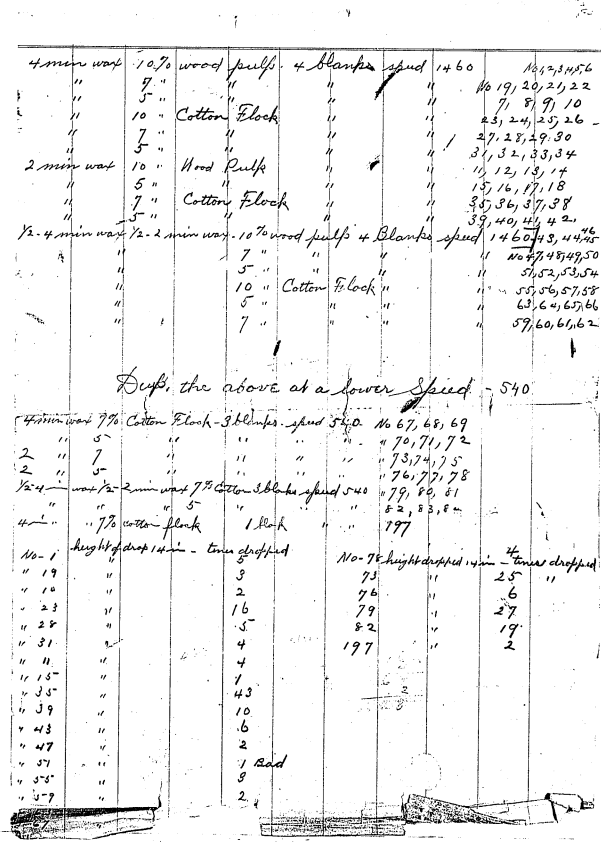
9 Jan 25-11

Time	Sept	Dec	T.	Surging Box	Records
11.00 AM	21	5			93, 11 missing
12.00	"	32		Shut open 1/3	Box between
1.00 PM	-20	- 4		" " 2/3	11 - 6 32 n.
1.30	-26	-14.5		" " "	
2.00	-29	-20		" " all	
2.30	-30	-22		" " "	
3.00	-31	-33.8		Shut 1/2 open	
3.30	-36	-32.8		" all "	Four cracked Blanks 210, 150, 151
4.00	-34	-32.8		" " "	183, 184, 186, 187, 189
5.00	-39	39.		" " "	190, 192, 193, 195, 196

Lot # 6 - 12 Records after a 6 hour cold test down to -39°
were all OK
They were taken from -39° into 62°F
all OK

Christensen

[ITEM FOUND IN BOOK]



4 min wat 10% wood pulp 4 blanks spun 1460 1,2,3,4,5,6
" " 7 " " " " " " No 19, 20, 21, 22
" " 5 " " " " " " 7, 8, 9, 10
" " 10 " Cotton Flock " " " 23, 24, 25, 26
" " 7 " " " " " 27, 28, 29, 30
" " 5 " " " " " 31, 32, 33, 34
2 min wat 10 " Wood Pulp " " " " 12, 13, 14
" " 5 " " " " " 15, 16, 17, 18
" " 7 " Cotton Flock " " " 35, 36, 37, 38
" " 5 " " " " " 39, 40, 41, 42
½-4 min wat ½-2 min wat 10% wood pulp 4 Blanks spun 1460 43, 44, 45, 46
" " 7 " " " " " No 47, 48, 49, 50
" " 5 " " " " " 51, 52, 53, 54
" " 10 " Cotton Flock " " " 55, 56, 57, 58
" " 5 " " " " " 63, 64, 65, 66
" " 7 " " " " " 59, 60, 61, 62

Duff, the above at a lower Speed - 540

4 min wat 7% Cotton Flock - 3 blanks spun 540 No 67, 68, 69
" 5 " " " " " " 70, 71, 72
2 " 7 " " " " " " 73, 74, 75
2 " 5 " " " " " " 76, 77, 78
½-4 " wat ½-2 min wat 7% Cotton 3 blanks spun 540 " 79, 80, 81
" " " 5 " " " " 82, 83, 84
4 " " 7% cotton flock 1 flock " " 197

No-1 height dropped 14 in - times dropped
" 19 " 5
" 10 " 3
" 23 " 2
" 28 " 16
" 31 " 5
" 11 " 4
" 15 " 4
" 35 " 1
" 39 " 43
" 43 " 10
" 47 " 6
" 51 " 2
" 55 " 1 Bad
" 59 " 3
" 67 " 2

No-76 height dropped 14 in - times dropped
" 73 " 4
" 76 " 25
" 79 " 6
" 82 " 27
" 197 " 19
" 2